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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/441,102	11/16/1999	DAVID A. SCHWARTZ	062891.0285	3856

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EXAMINER

WAXMAN, ANDREW

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/441,102

Applicant(s)

SCHWARTZ ET AL.

Examiner

Andrew M Waxman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 January 2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 12-16, 23-27, 33-36, 43-46, 53, 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6,275,499), in view of Bare (US Patent No. 6,216,167).

Regarding claims 1, 2, 12, 13, 25, 35, 45, and 55, Wynn discloses a plurality of cards in a backplane (Col 5, lines 30-40), where the cards each have unique network addresses, and communicate packets to the cards (Col 9, lines 5-10), and where the frames are shown to contain address

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information (Figures 8 and 9), where more than one packet is transmitted between network devices on the backplane (Figure 22) and the association of ports on the backplane cards (Figure 19).

Wynn does not expressly disclose the network devices having a MAC address and the Ethernet communicating protocol.

Bare discloses Ethernet and MAC addresses used throughout the network where the packets have destination addresses to include MAC addresses using the Ethernet protocol (Col 14, lines 30-36).

Therefore, at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of an Ethernet standard and MAC addresses, into the invention as disclosed by Wynn.

One of ordinary skill in the art would have been motivated to do this in order to conform to one of the most common standards in LAN and for the devices of the applicant's invention to more readily communicate with the Ethernet devices external to its existing structure.

Regarding claims 16, 26, 36, 46, and 56, Wynn discloses a plurality of buses on the backplane system (Col 1, lines 48-54), and an OC-3 type network interface capability (Col 2, lines 3-5) where OC-3 is a well-known dedicated bandwidth at 155.52 Mbps (Col 1, lines 22-23).

Regarding claims 24, 34, 44, and 54, examiner takes official notice that it is a well known feature of a network card to have a standardized network address associated with its identity, as a MAC address is a standardized network address identifier for any Ethernet network card, a commonly known and abundant type of network card.

Regarding claims 3, 14, 23, 33, 43, and 53 Wynn discloses a backplane used for networking with all of the above embodiments.

Wynn does not expressly disclose a plurality of packets being transmitted to the backplane cards by means of network devices external to the network.

Bare discloses network switches communicating throughout a network external to one another (Figure 13) and in conjunction with a backplane device (Col 33, lines 25-30) and a plurality of packets sent outside the central domain network (Col 6, lines 60-64).

Therefore, at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of a backplane with a series of network switches.

One of ordinary skill in the art would have been motivated to do this in order to provide more network connectivity to devices that have various physical attributes and not to exclude devices external to the central networking devices.

Regarding Claims: 4, 15, 27, and 57, Wynn discloses a backplane used for networking with all of the above embodiments.

Wynn does not expressly disclose a network switch being coupled to the backplane switch.

Bare discloses network switches communicating throughout a network (Figure 13) and in conjunction with a backplane device (Col 33, lines 25-30).

Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of a backplane with network switch.

One of ordinary skill in the art would have been motivated to do this in order to provide more network connectivity to devices that have various physical attributes.

Regarding claim 5, Wynn further discloses a plurality of buses on the backplane system (Col 1, lines 48-54), and an OC-3 type network interface capability (Col 2, lines 3-5) where OC-3 is a well known dedicated bandwidth at 155.52 Mbps (Col 1, lines 22-23).

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Claim Rejections - 35 USC § 103

2. Claims 6-8, 10, 17-19, 21, 28, 29, 31, 37-39, 41, 47-49, 51, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn, in view of Bare and further in view of Peirce (US Patent No. 6,157,649).

Regarding claims 6, 7, 10, 17, 18, 21, 28, 31, 37, 38, 41, 47, 48, and 51, Wynn discloses a backplane used for networking with all of the above embodiments

Wynn does not disclose a gateway card coupled to a telephone network in conjunction with an IP address.

Peirce discloses a backplane network device (Col 5, lines 9-10) with a gateway card that answers calls (Col 2, lines 30-31), where the network is a telephone network (Col 1, lines 18-19), where the data transfer between units includes the IP protocol address association (Figure 4), with a plurality of packets being sent (Figure 3).

Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of IP addresses and telephone network connectivity, into the invention as disclosed by Wynn.

One of ordinary skill in the art would have been motivated to do this as part of a large integration effort for networking improvement projects.

Regarding Claims 8, 19, 29, 39, 49, and 58, Wynn discloses a backplane used for networking where there exists a priority scheme for prioritizing data by bits (Col 18, lines 44-50).

Wynn does not expressly disclose a gateway card coupled to a telephone network transferring voice data in connection with the backplane device.

Peirce discloses a backplane network device (Col 5, lines 9-10) with a gateway card that answers calls (Col 2, lines 30-31), where the network is a telephone network (Col 1, lines 18-19) and telephone networks carry voice.

Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of a gateway card to transfer network information that includes the data associated with voice, in the form of prioritized data packets, into the invention as disclosed by Wynn.

One of ordinary skill in the art would have motivated to do this to facilitate the prioritizing of time sensitive data like voice for efficient human perception requirements.

Claim Rejections - 35 USC § 103

3. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn in view of Lemaire (US Patent No. 6,205,149).

4. Claims 30, 40, and 50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn (US Patent No. 6275499), in view of Bare (US Patent No. 6216167) and further in view of Lemaire (US Patent No. 6205149).

Regarding claims 9, 20, 30, 40, and 50, Wynn discloses a network backplane device where network data is transferred to and from cards on the backplane.

Wynn does not expressly disclose a priority indicator in the form of bits used to indicate a QoS level of association for an IEEE 802.1q standard used in conjunction with the current invention.

Lemaire discloses a priority bit used in a networking environment for a QoS indicator (Col 1, lines 35-39), where the system is capable of processing an 802.1 q type packet for selection (Col 6, table/lines 23-24), where the QoS is implemented within the packet data transfer algorithm (Col 6, lines 28-31).

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Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the use of a QoS standard with 802.1(q) standard into a backplane network design.

One of ordinary skill in the art would have been motivated to do this in order to facilitate a broader acceptance of standardization.

Claim Rejections - 35 USC § 103

5. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn in view of Francis (US Patent No. 6,426,952).

6. Claims 32, 42, 52 and 59, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynn in view of Bare and further in view of Francis.

Regarding claims 11, 22, 32, 42, 52, and 59, Wynn discloses a network backplane device.

Wynn does not disclose a hot-swappable configuration for the backplane or a configuration where a card from the backplane could be removed while the system is powered on or operating.

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Francis discloses a backplane with a method for hot-swapping cards while the system is operating (Col 27, lines 34-36).

Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to have included the feature of removing cards from a backplane device while operation is active, into the invention as disclosed by Wynn.

One of ordinary skill in the art would have been motivated to do this in order to provide a fast and easy method of maintenance or repair.

Response to Arguments

Applicant's arguments filed 5 January 2004 have been fully considered but they are not persuasive.

Claims 1, 12, 23, 33, 43, and 53:

Regarding claims **1, 12, 23, 33, 43, and 53**, Applicant contends that Bare does not teach or fairly suggest the use of Ethernet (protocol) or MAC (addresses) to communicate data internally within a computing or communicating devices.

However, the Examiner contends that it is irrelevant whether the reference teaches the use of the protocols and addresses internally or externally because the functionality of the uses (internal or external) is the same. Furthermore, in view of the claim language, there is no

suggestion that the use of the addresses and protocols internally would have a different functionality than those used externally.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M Waxman whose telephone number is (703) 305-8086. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew M. Waxman


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SUPERVISORY PATENT EXAMINER
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